

Technical Cybersecurity

NMAP Lab Configuration

An NMAP Lab

VMWARE OR VIRTUALBOX

- ▶ I use VMWare. I think it has better networking support
- ▶ VirtualBox should be fine too, I've used it in the past

**Class will be taught from a VMWare perspective.
If you use VirtualBox, you will be able to translate
my directions, but it won't be accurate.**

You'll be on your own.

Linux Images

KALI LINUX

- Penetration testing distribution.
- It has the majority of tools we'll be using preinstalled

UBUNTU LTS

- We'll use various Ubuntu VMs as pivots, other work when we don't want to spend the time hacking it to start with

CUSTOM DISROS

- Metasploitable, DVL, etc.
- We'll attack these

Aside: Linux or Windows?

MOSTLY LINUX. WHY?

- ▶ ...we can still acquire copies of Windows 95 or XP, but you can't get licenses! Microsoft doesn't sell them.
- ▶ You can buy them from places like ebay
- ▶ You can find them online (...but illegal, so let's not do that)

OLD VERSIONS OF LINUX ARE EASIER TO FIND

- ▶ And the license terms are better :-)

Step 1: Download

KALI LINUX

- ▶ <https://www.offensive-security.com/kali-linux-vm-vmware-virtualbox-image-download/>
- ▶ You can download VirtualBox and VMWare images
- ▶ Created by Offensive Security

UBUNTU LTS

- ▶ <https://www.osboxes.org>
- ▶ Download VirtualBox or VMWare images
- ▶ Or download ISO from Ubuntu
- ▶ I used the server ISO

Step 1: Download

METASPLOITABLE

- ▶ <https://sourceforge.net/projects/metasploitable/>
- ▶ Also created by Offensive Security
- ▶ ...used with their online Metasploit book, which we'll use later

Step 2: Installation

IMAGES

- ▶ Just open the images with your virtualization product

ISOs

- ▶ Create a new VM, install into the VM using the ISO
- ▶ Kali, Metasploitable install with defaults
- ▶ For Ubuntu YOU MUST ENSURE SSH IS INSTALLED
 - ▶ ...we'll use this for tunneling
 - ▶ ...we'll use other command line stuff to but make sure SSHD is installed on the Ubuntu image

Next up, networking.